



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,338	04/09/2004	Christa Harris	THR-6216	1230
7590 01/24/2006			EXAMINER	
ALLEGIANCE CORPORATION			ROANE, AARON F	
ATTN: Kim Luna, KB-1A			ART UNIT	
1430 Waukegan Rd			PAPER NUMBER	
McGaw Park, IL 60085-6787			3739	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/821,338

Applicant(s)

HARRIS ET AL.

Examiner

Aaron Roane

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitahara et al.

(USPN 5,261,241) in view of Maro et al. (USPN 5,491,018) and in further view of Helmeg (USPN 6,648,909 B2).

Regarding claims 1 and 3-7, Kitahara et al. disclose a topically applied thermal device (13) comprising a flexible plastic containment (10, 12 and 14) and a single activatable thermochemical liquid composition (e.g., B, the water and 8-hydrate of strontium hydroxide mixture shown in figure 2) encased therein, said flexible plastic containment comprising a multilayer film (10, 12 and 14) comprising: an outer polymeric barrier layer (12) comprising a coating (10), and an inner polymeric sealant layer (14). Kitahara et al. further disclose that the outer polymeric layer is comprised a layer of polyester (12) coated with a layer of aluminum (12) in order to provide the device with a liquid

impervious, leak proof layer see col. 5, lines 29-61, col. 10 and figure 2. Kitahara et al. also disclose the flexible plastic containment (10, 12 and 14) defines a single interior compartment (see single interior compartment shown in figure 2). Kitahara et al. fail to disclose that the coating is either aluminum oxide or silicon oxide coating. Kitahara et al. also fail to disclose that the inner polymeric sealant layer comprises a blend of low density polyethylene (LDPE) and ethylvinyl acetate (EVA). Maro et al. disclose a laminated packing material and teach the coating of polyester with a silicon oxide layer in order to provide the device with a liquid impervious, leak proof layer, see col. 1-12, particularly col. 1, lines 9-23 and col. 3, lines 31-37. Helmeg discloses a hot/cold pack and teaches the use of making a inner layer, seal and/or bag from LDPE in order to provide a burstable/rupturable barrier to the device, see col. 1-6 and figures 1-9. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Kitahara et al., as taught by Maro et al., to coat the polyester layer with a silicon oxide layer in order to provide the device with a liquid impervious, leak proof layer, and as further taught by Helmeg, to make the inner layer, seal and/or bag from LDPE in order to provide a burstable/rupturable barrier to the device. Finally, at the time of the invention, it would have been an obvious matter of design choice to one of ordinary skill in the art to use an inner polymeric sealant layer comprised of low density polyethylene (LDPE) because Applicant has not disclosed that an inner polymeric sealant layer comprising a blend of low density polyethylene (LDPE) and ethylvinyl acetate (EVA) provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have

expected Applicant's invention to perform equally well with only the LDPE because it also provides the burstable/rupturable capabilities.

Regarding claim 2, Kitahara et al. further disclose a device comprising an adhesive layer laminating together said outer polymeric barrier layer and said inner polymeric sealant layer, see col. 6.

Regarding claim 8, Kitahara et al. disclose the claimed invention, see col. 1-16.

Regarding claims 9 and 10, Kitahara et al. disclose the claimed invention, see col. 1-16.

### *Response to Arguments*

Applicant's arguments filed 11/03/2005 have been fully considered but they are not persuasive. The examiner will address each argument/remark in turn.

Beginning on page 5, last paragraph and continuing to page 6, line 2, Applicant questions the combination of Kitahara et al. and Maro et al. and asserts that "there are substantive physical and chemical difference between an aluminum shed and oxide coatings." Kitahara et al. disclose and aluminum coating used to provide the device with a liquid impervious, leak proof layer. Maro et al. while intended for use in packaging disclose/teach the use of coating the polyester layer with a silicon oxide layer in order to provide the device with a liquid impervious, leak

Art Unit: 3739

proof layer. The fact that both references teach the provision of the prevention/reduction of liquid leaking/evaporation would motivate one of ordinary skill in the art to combine the references in order to provide alternate, equivalent and/or improvements in water/liquid retention of the device.

Next, Applicant refutes the combination of Kitahara et al. (in view of Maro et al.) and Helming. Kitahara et al. uses a rupturable inner bag (14 in figure 2) and Helming discloses a thermal cooling device and teaches the use of providing a burstable/rupturable inner bag made of LDPE. “Applicants are at a loss to understand this argument because Applicants' invention does not involve a rupturable barrier component and in fact such would be against the functional attributes on the instant invention,” see page 6, lines 6-8. Although it is clear from the specification that Applicants' invention makes no use of a burstable/rupturable barrier/membrane there is nothing in the language of the claims that precludes the application of prior art having a burstable/rupturable barrier/membrane. In fact Applicants' claimed invention uses what is commonly referred to as a physical trigger (4 in figure 1 of the present application), but unfortunately Applicant fails to provide claim language which precludes the examiner from making interpretations (broad or narrow) that render the presently claimed invention as set forth in the claim language unpatentable over the prior art of record. Although operational characteristics of an apparatus may be apparent from the specification, we will not read such characteristics into the claims when they cannot be fairly connected to the structure recited in the claims. See *In re Self*, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982).

Regarding Applicants' assertion of “creative gap-filling” and “inappropriate level of hindsight” on the part of the examiner, the examiner wishes again to draw attention to the issue

Art Unit: 3739

of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As for the assertion of hindsight, the examiner wishes to point out "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

Applicants may also argue that the combination of two or more references is "hindsight" because "express" motivation to combine the references is lacking. However, there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (*Ruiz* at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (*National Steel Car v. Canadian Pacific Railway Ltd.*, 357 F.3d 1319, 1338, 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)). See MPEP § 2143.01 for a discussion of proper motivation to combine references.

Regarding the last paragraph of page 6 that ends on line 4 of page 7, Applicants assertion that the combination of Kitahara et al. and Maro et al. is "technologically non-sensical." Although Applicants have a right to their opinion, the Office and examiner have a duty to

Art Unit: 3739

maintain and even reaffirm rejections when they are deemed proper. The examiner has attempted many times to fully demonstrate the motivation for combining the above references.

Finally for all of Applicants' assertions, arguments and remarks, there are no claimed structural features that distinguish the presently claimed invention over the prior art of record. Additionally, even the presently claimed functional limitations can be met by the prior art.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (571) 272-4771. The examiner can normally be reached on Monday-Thursday 7AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.R. *A.R.*  
January 20, 2006

*Roy D. Gibson*  
ROY D. GIBSON  
PRIMARY EXAMINER